# 201-15378

**rdenison@environmentaldefense.org**
06/22/2004 09:45 AM

To: NCIC OPPT@EPA, ChemRTK HPV@EPA, Rtk Chem@EPA, NCIC HPV@EPA, Karen Boswell/DC/USEPA/US@EPA, sonny_maher@americanchemistry.com
cc: lucierg@msn.com, kflorini@environmentaldefense.org, rdenison@environmentaldefense.org
Subject: Environmental Defense comments on the Fatty Nitrogen Derived Ether Nitriles Category

(Submitted via Internet 6/22/04 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov, boswell.karen@epa.gov, chem.rtk@epa.gov, lucierg@msn.com and sonny_maher@americanchemistry.com)

RECEIVED
OPPT CBIC
04 JUN 23 AM 10:08

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for the Fatty Nitrogen Derived Ether Nitriles Category.

The test plan and robust summaries for the fatty nitrogen derived ether nitriles (FNDEN) category were submitted by the Nitriles Task Group of the American Chemistry Council. This category is comprised of three substances: propanenitrile,3-(C8-10-alkoxy) derivatives (68784-39-4), propanenitrile, 3-(isodecyloxy) (64354-92-3) and propanenitrile, 3-(tridecyloxy) (68239-19-0). Although we do concur with the sponsor that the establishment of this category is justified (structures of proposed members differ only in the alkyl chain length), we do not agree that existing data are sufficient to meet HPV requirements for all endpoints. We also found the justification for considering FNDEN members as closed system intermediates to be inadequate.

In regard to the claim of closed system intermediate status, the sponsor admits that the amount of FNDEN is not measured in either the unidentified end products or waste streams arising from the chemical syntheses. The sponsor claims that if residues were present, they could be detected by smell, but no odor detection limits are provided. The sponsor also states, in the closed system intermediate justification, that FNDEN members are non-toxic. This statement is both wrong and an irrelevant justification for claiming a substance as a closed system intermediate. Some FNDEN members are very toxic to aquatic species, and there are no data on repeat dose, developmental, reproductive or genetic toxicity endpoints.

The sponsor proposes to use surrogate data from dodecanenitrile to fulfill many of the SIDS endpoints. No studies are proposed on the three members of the proposed FNDEN category. The justification for using this surrogate is inadequate and it does not address the importance of the ether linkage and the influence that it might have on metabolism, toxicity and mechanism of action. Moreover, dodecanenitrile is in a different category from the proposed FNDEN category, so we cannot help but ask the following question: If dodecanenitrile can be used as a surrogate for the FNDEN category, then why was it proposed by the sponsor for membership in a different category?

Based on the comments in the above paragraphs, we recommend that the sponsor conduct a combined repeat dose/reproductive/ developmental toxicity study on one of the three members of the proposed category. We also recommend that both in vitro and in vivo genetic toxicity studies be conducted on at least one member. Acute toxicity studies should not be necessary, since non-GLP studies indicate that these substances should have

a low order of acute toxicity and the range-finding component of the combined study should provide a reasonable indication of acute toxicity. Existing data for the ecotoxicity and environmental fate endpoints appear adequate to fulfill requirements of the HPV program.

Thank you for this opportunity to comment.

George Lucier, Ph.D.
Consulting Toxicologist, Environmental Defense

Richard Denison, Ph.D.
Senior Scientist, Environmental Defense